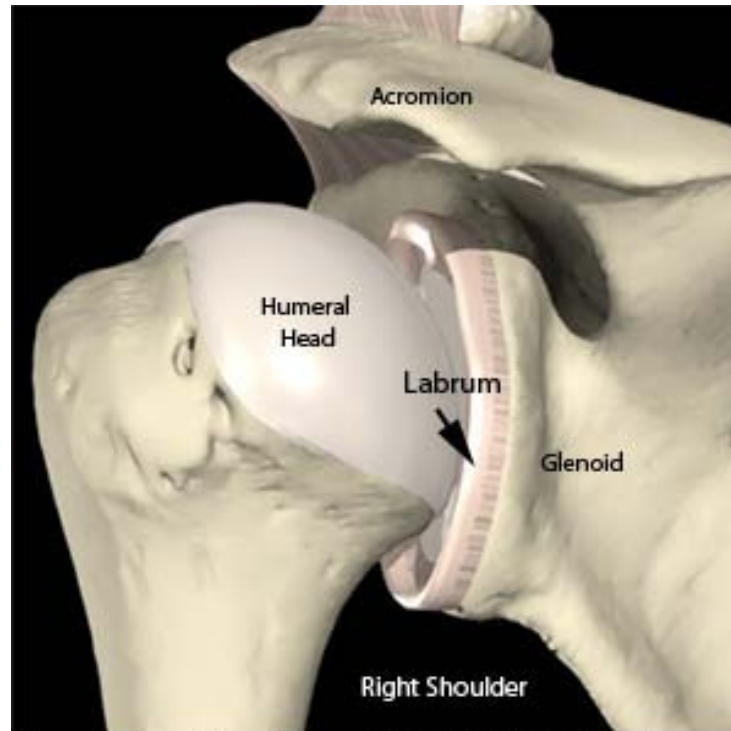


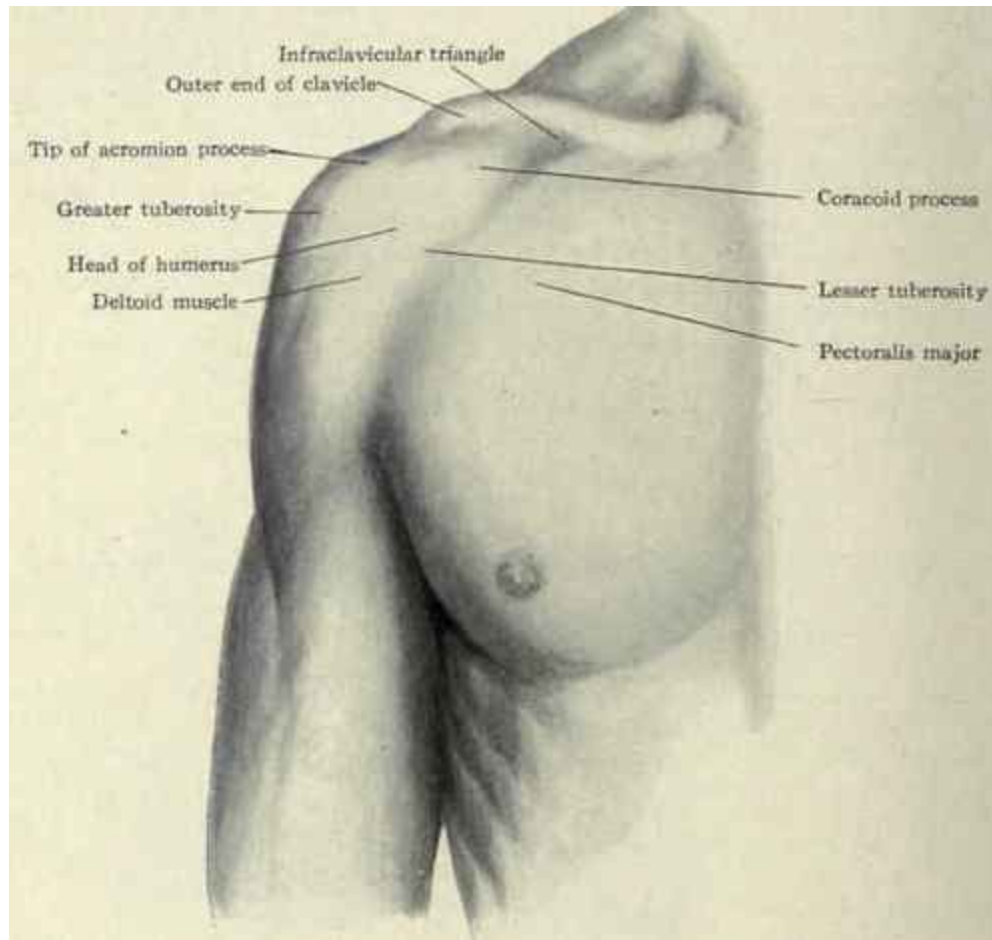
Shoulder Injuries

by: Nanda K. Sinha, M.D.

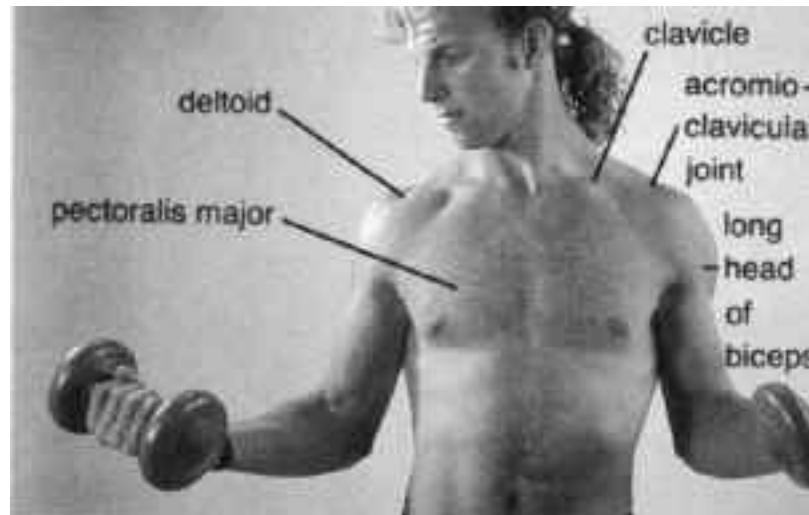


Interactive Shoulder v1.0 © 2000 Primal Pictures Ltd.

Surface Anatomy



Surface Anatomy



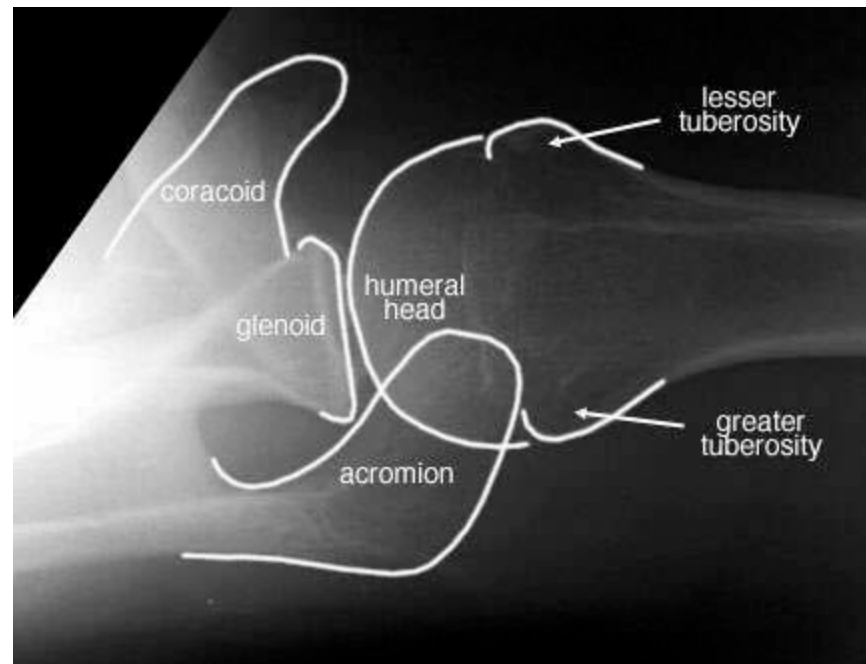
Surface Anatomy



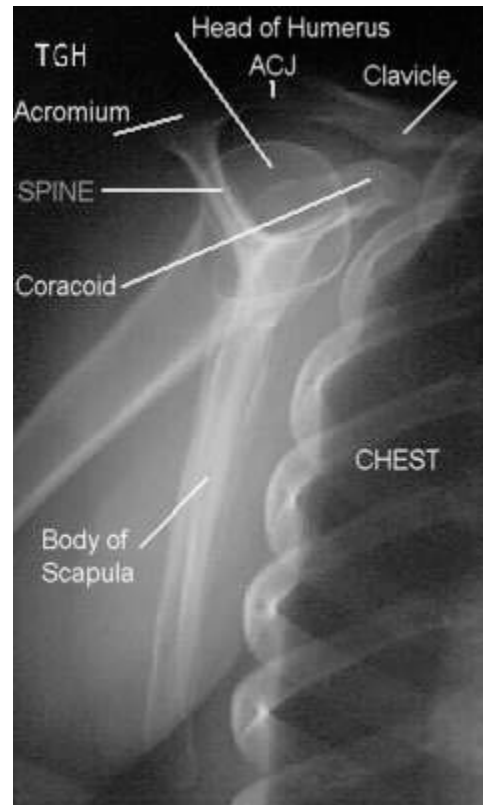
Normal shoulder



Normal shoulder: axillary view



Normal xray-scapular Y view



Gleno-Humeral dislocation

Anterior:Posterior

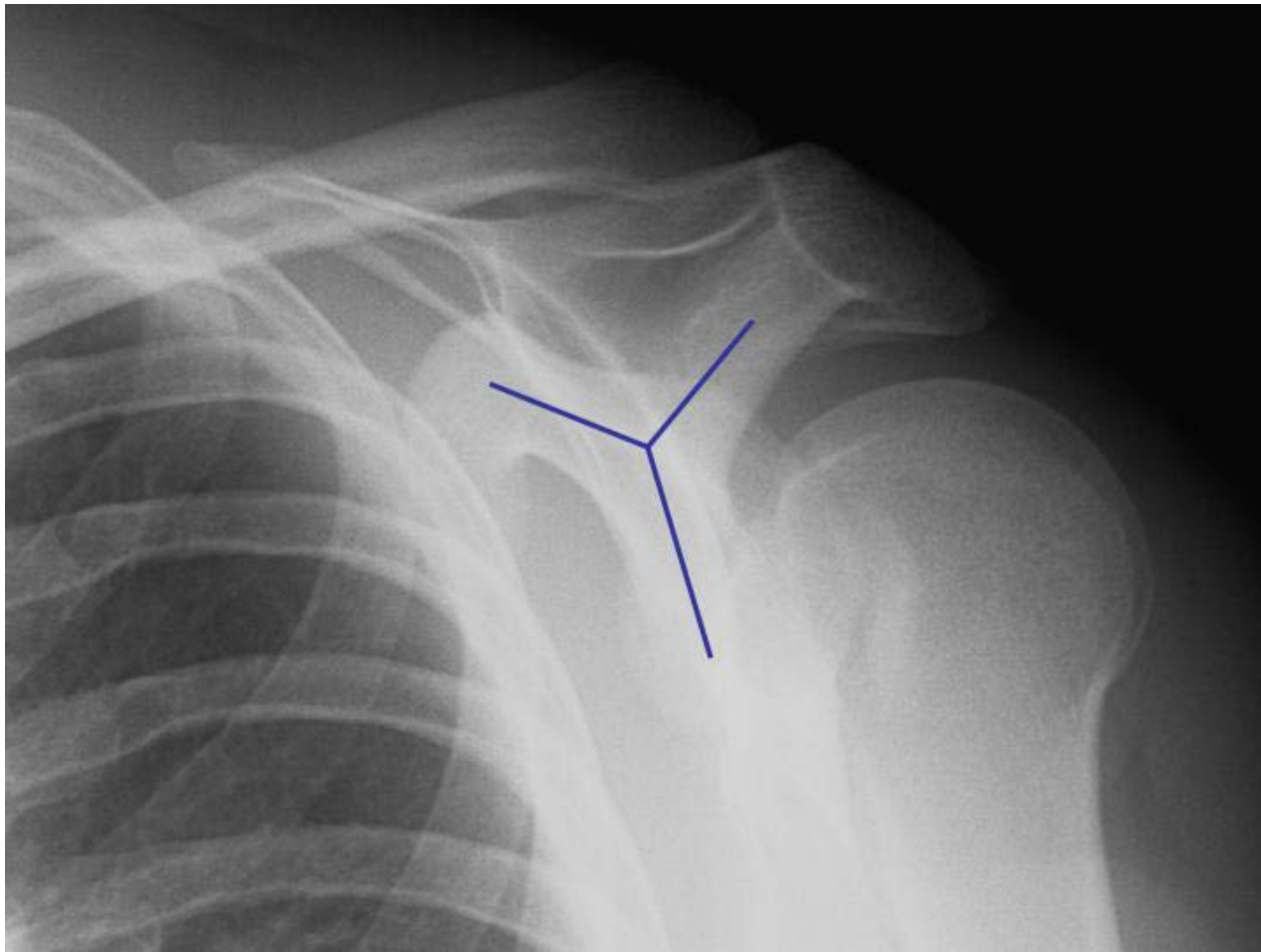


Gleno-Humeral dislocation Inferior

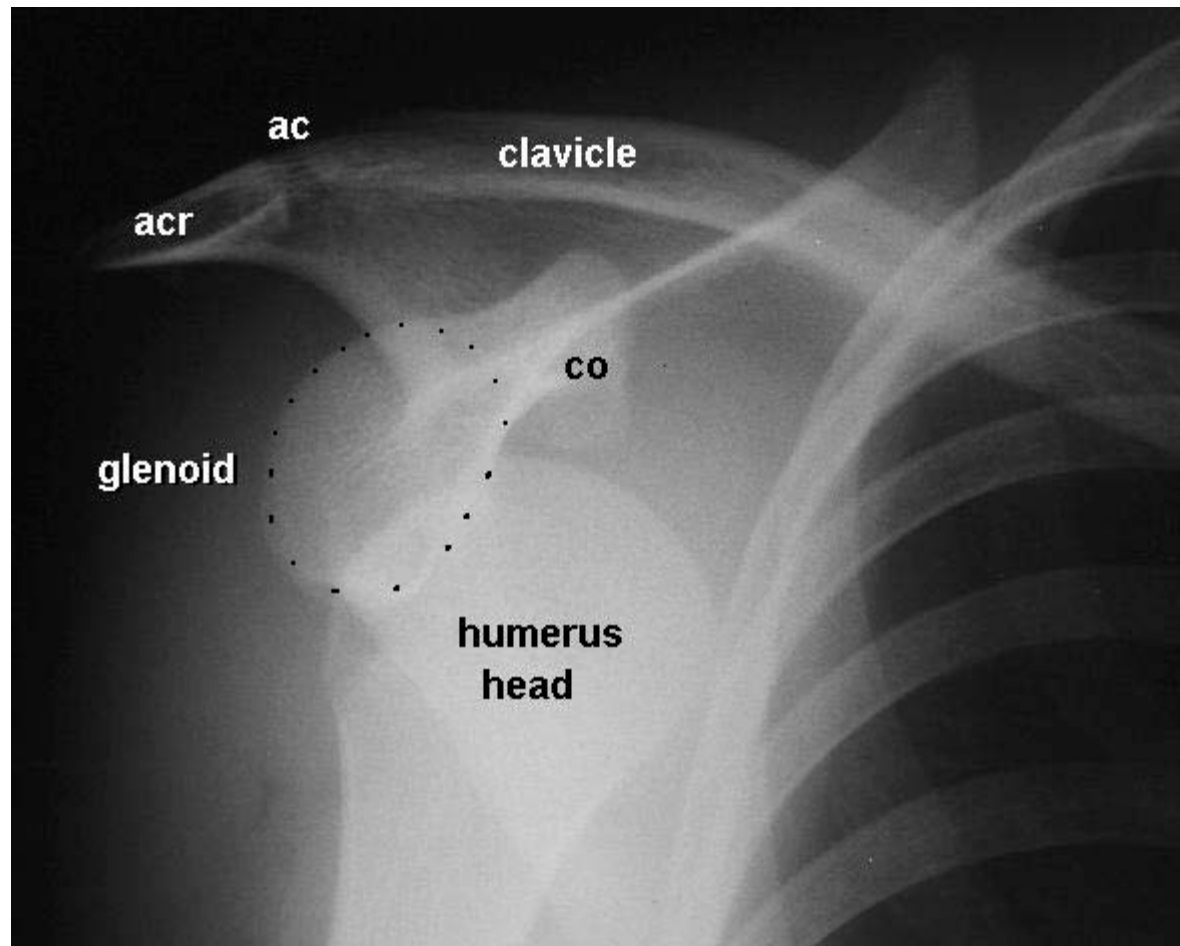


Gleno-Humeral dislocation

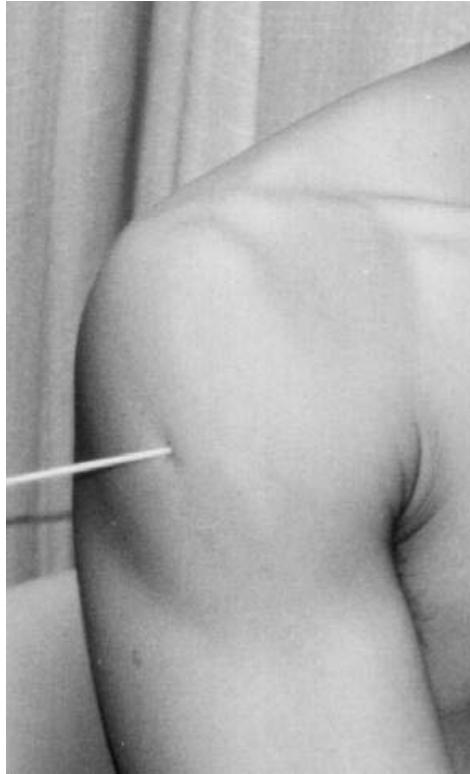
Y view of scapula



Gleno-Humeral dislocation



Gleno-Humeral dislocation

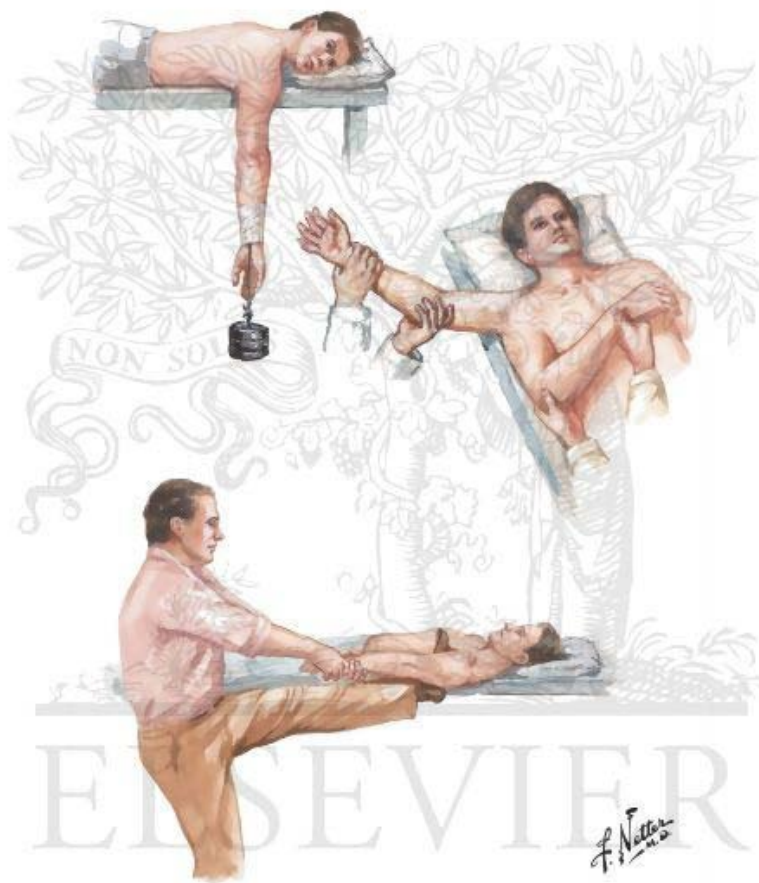


Gleno-Humeral dislocation (shoulder dislocation)

- Anterior: Most common
- Posterior: Most missed
- Inferior: Most dramatic
- Superior: Acromion blocks superior displacement

Gleno-Humeral dislocation

Reduction technique



Gleno-Humeral dislocation

Reduction technique



Gleno-Humeral dislocation

Reduction technique

Figure 4: © 2002. Terry Boles

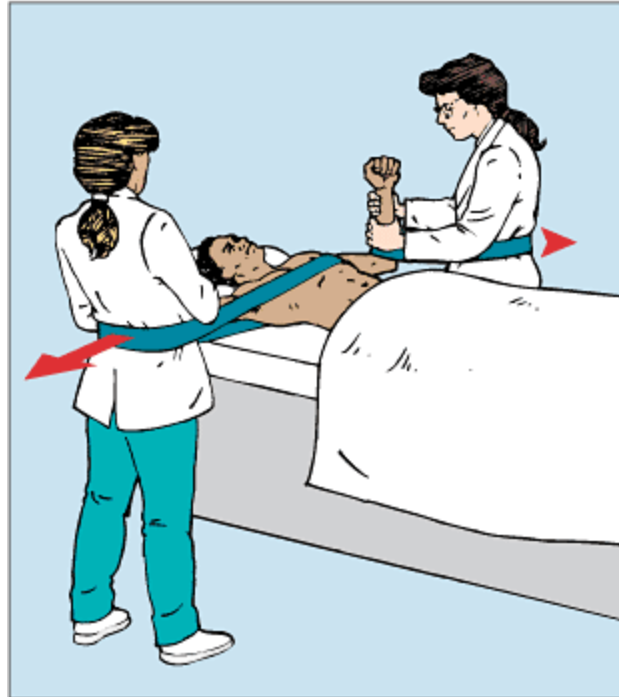


FIGURE 4. Using the traction-countertraction technique, a sheet around the patient's chest and assistant's waist provides countertraction (arrow). A second sheet looped around the patient's forearm and the clinician's waist creates axial traction (arrowhead) when the clinician leans back while holding the patient's forearm in 90° of flexion. The clinician can also use the forearm as a lever to gently move the humerus from internal to external rotation.

Gleno-Humeral dislocation

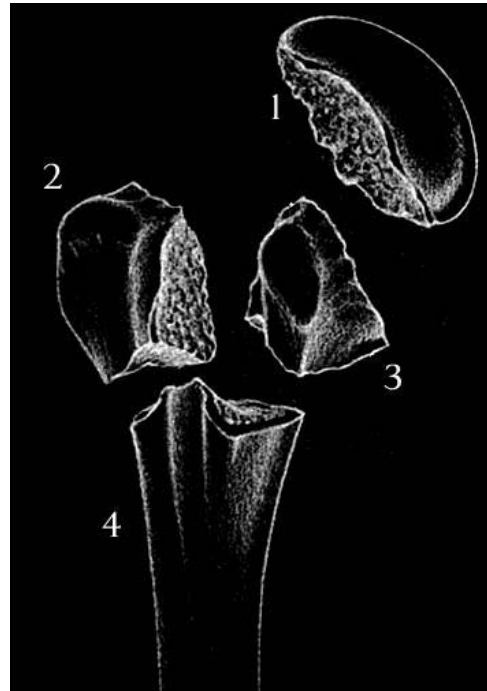
Reduction technique



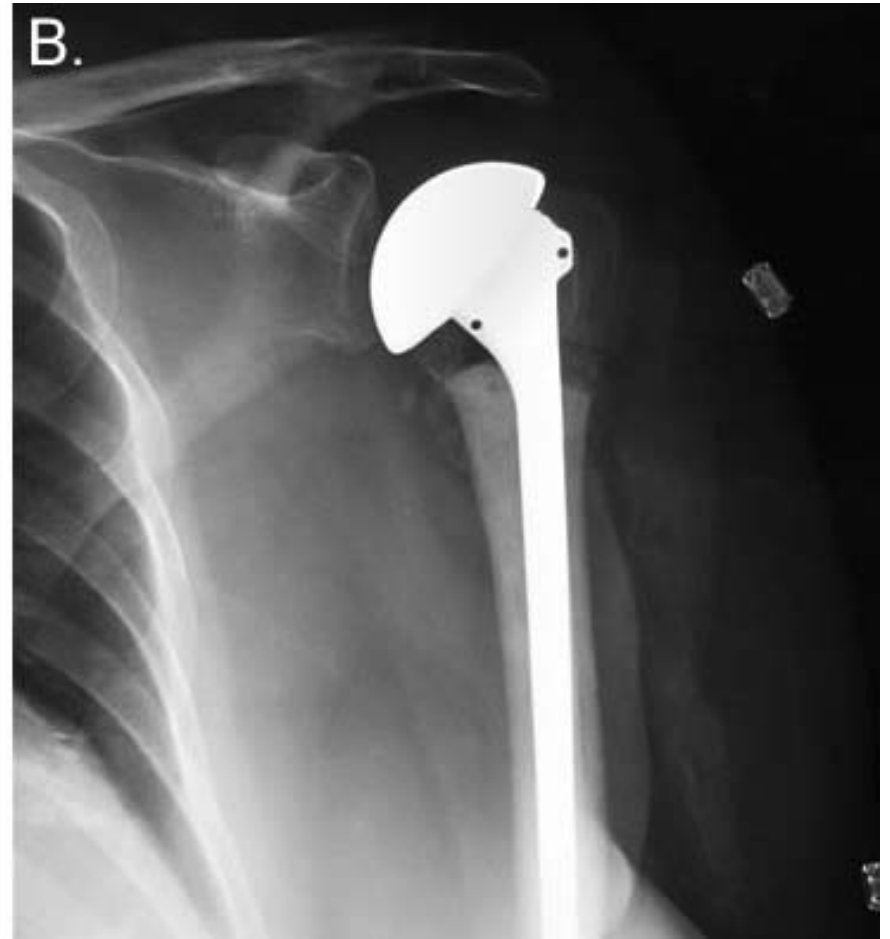
Minimally displaced fracture: non-operative management



4 part fracture



4 part fracture -Treatment



displaced fracture: closed or open
reduction: fixation



Non-op vs operative



Fracture: shaft of humerus



Clavicle Fracture



Clavicle Fracture

- **Medial (inner) 1/3rd**
uncommon
- **Middle 1/3rd**
most common
- **Lateral (outer) 1/3rd**

Clavicle Fracture

middle 1/3rd



Clavicle Fracture

Lateral 1/3rd



Clavicle Fracture



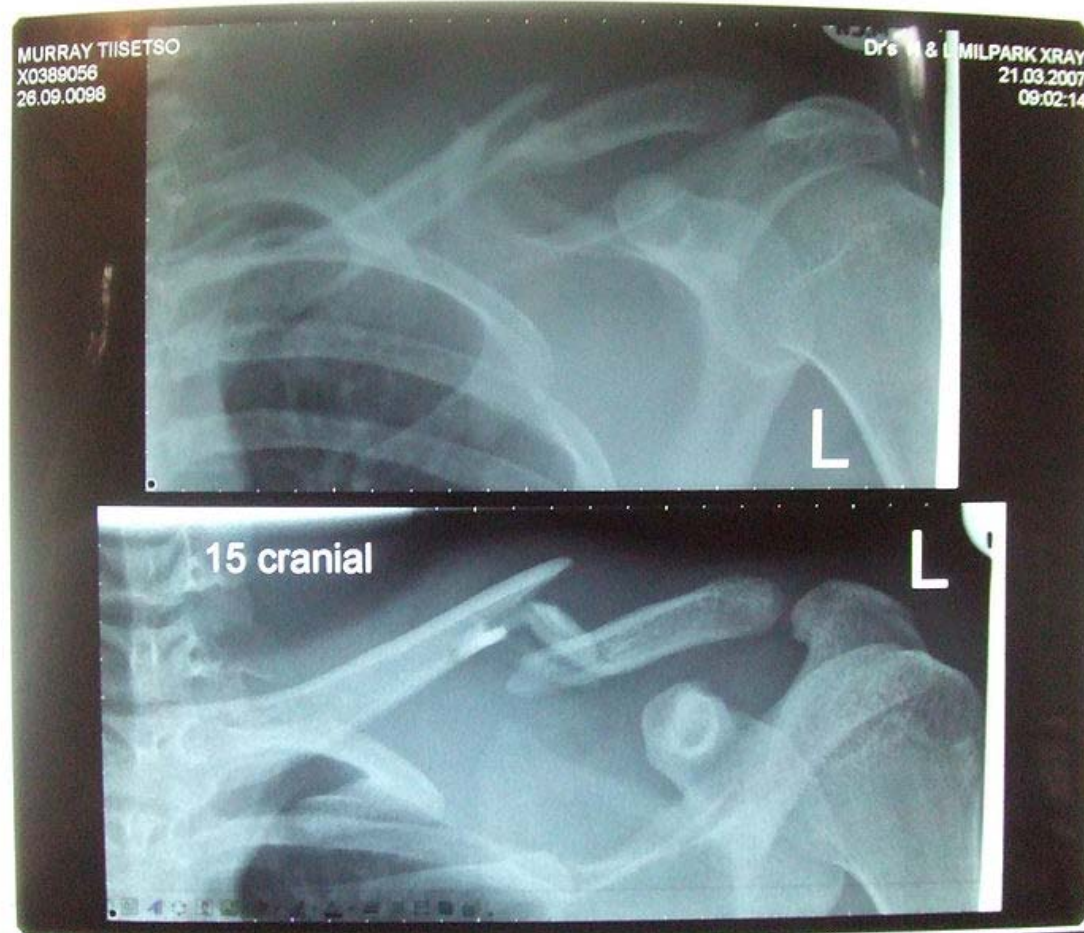
Clavicle Fracture

comminuted,displaced



Clavicle Fracture

x-ray 15 degree cranial



Clavicle Fracture

Indications for ORIF

- Shortening of 20 mm or more
- Open injury
- Impending skin disruption and irreducible fracture
- Vascular compromise
- Progressive neurologic loss
- Displaced lateral 1/3rd fracture

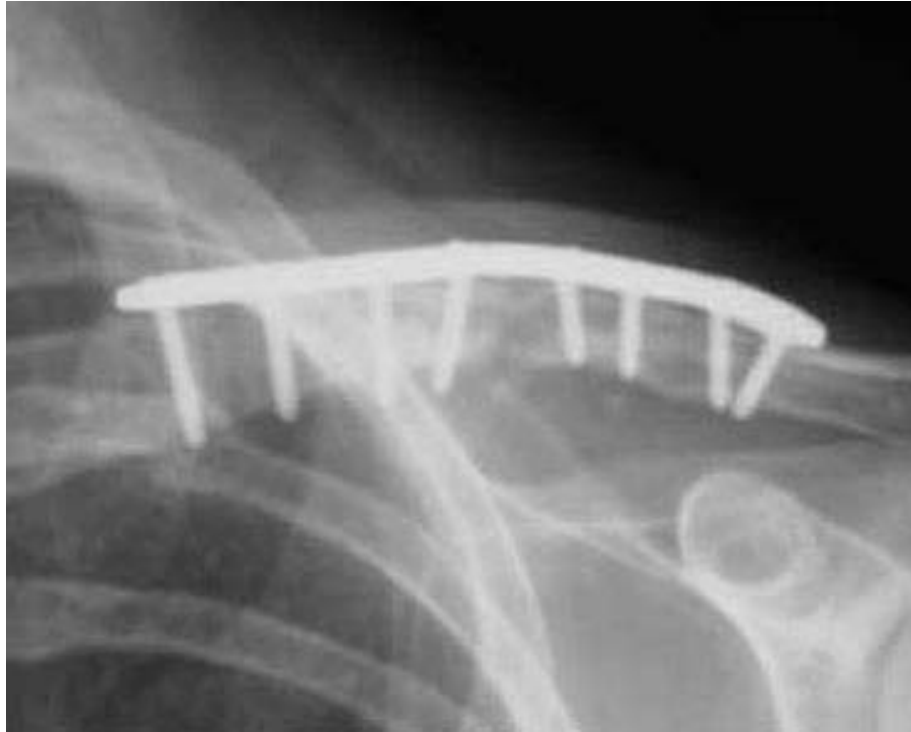
Clavicle Fracture

arm sling vs fig of 8



Clavicle Fracture

open reduction internal fixation (ORIF)



Clavicle Fracture

non-op vs orif



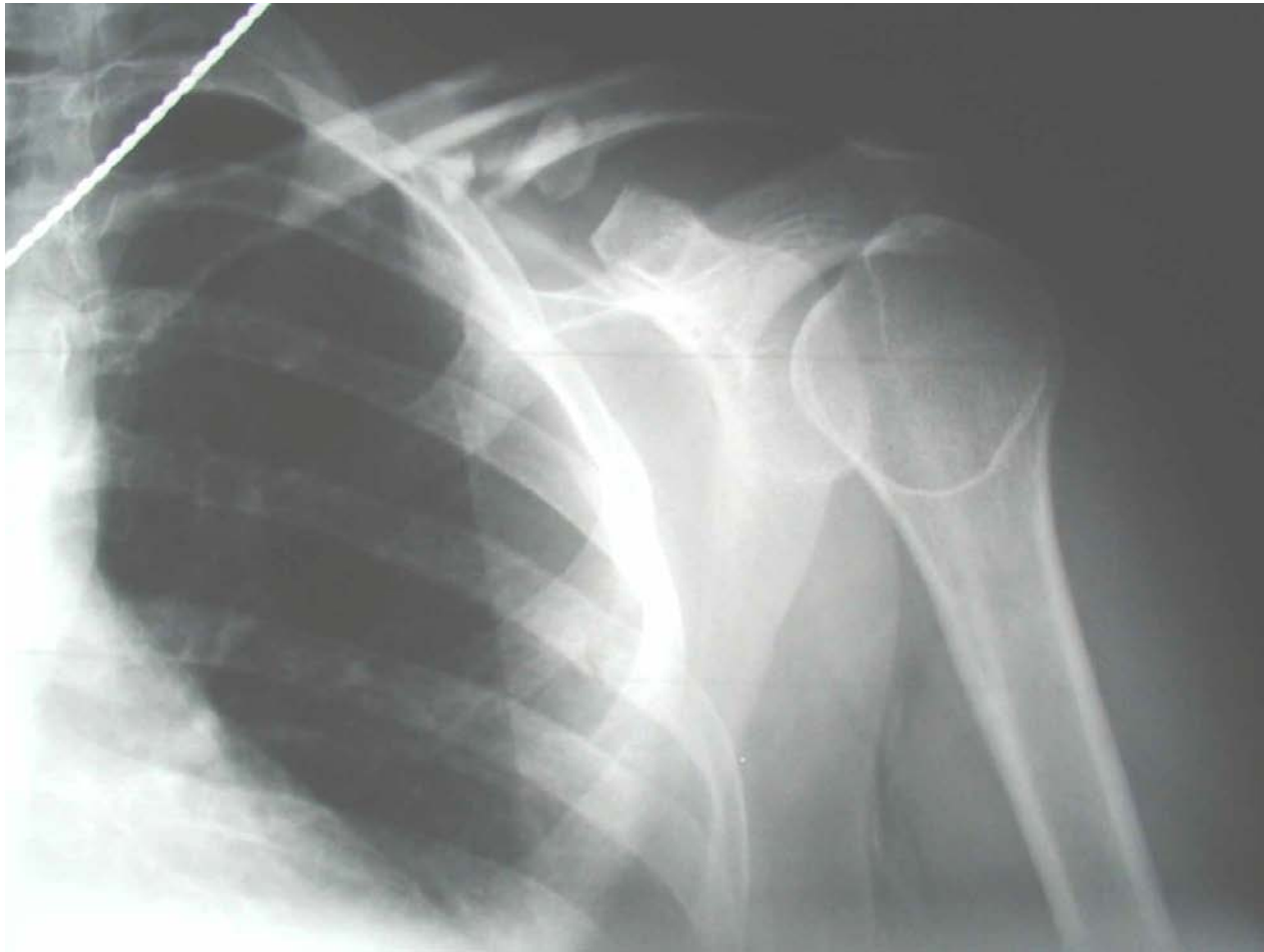
Clavicle Fracture

non op vs orif



Clavicle Fracture

non-op vs orif

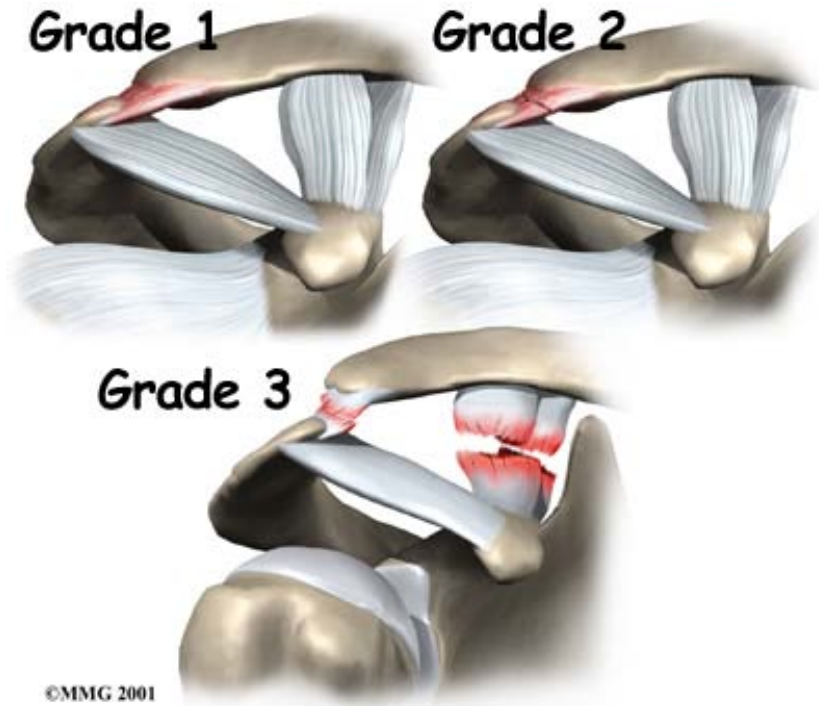


Clavicle Fracture

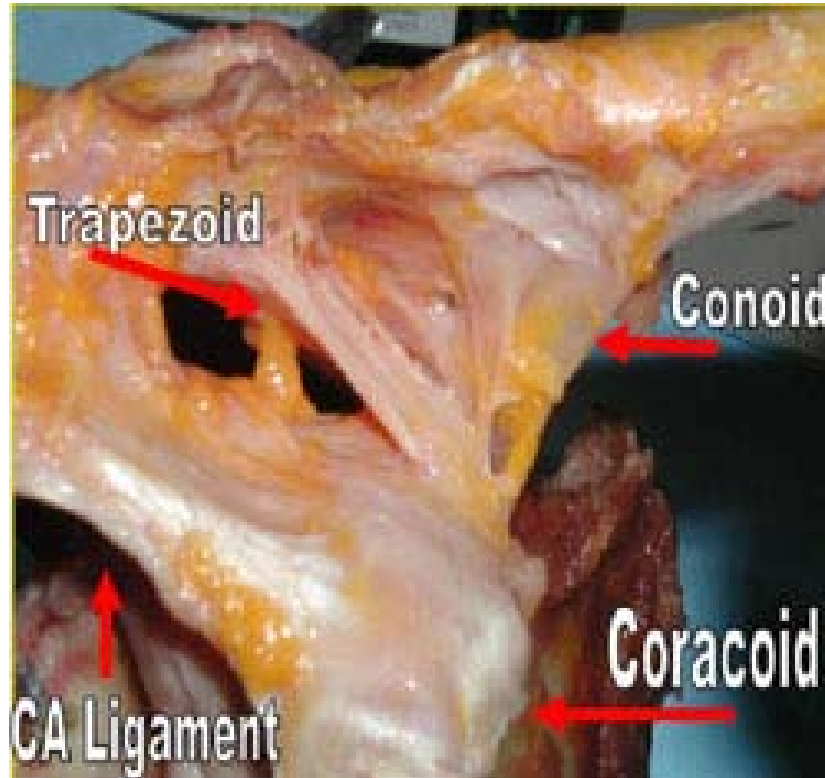
non-op vs orif



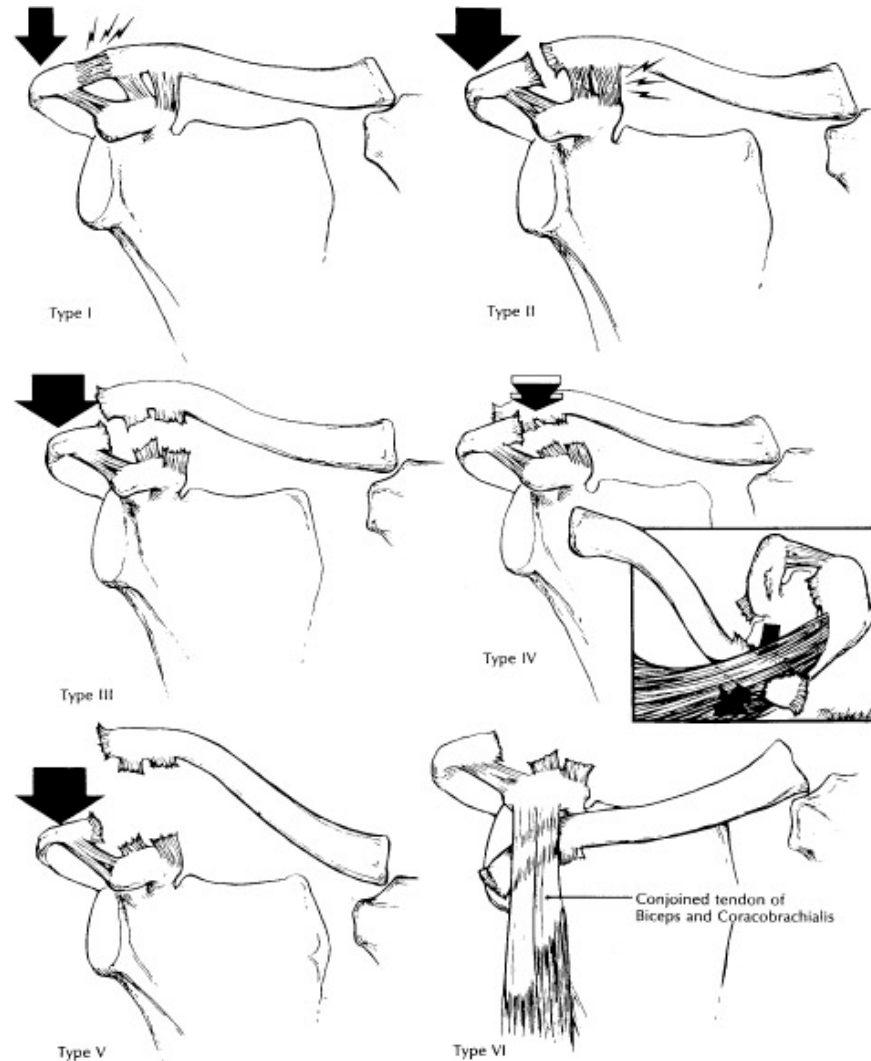
Acromio-Clavicular Dislocation (A-C Joint dislocation)



Acromio-Clavicular Dislocation



Acromio-Clavicular Dislocation

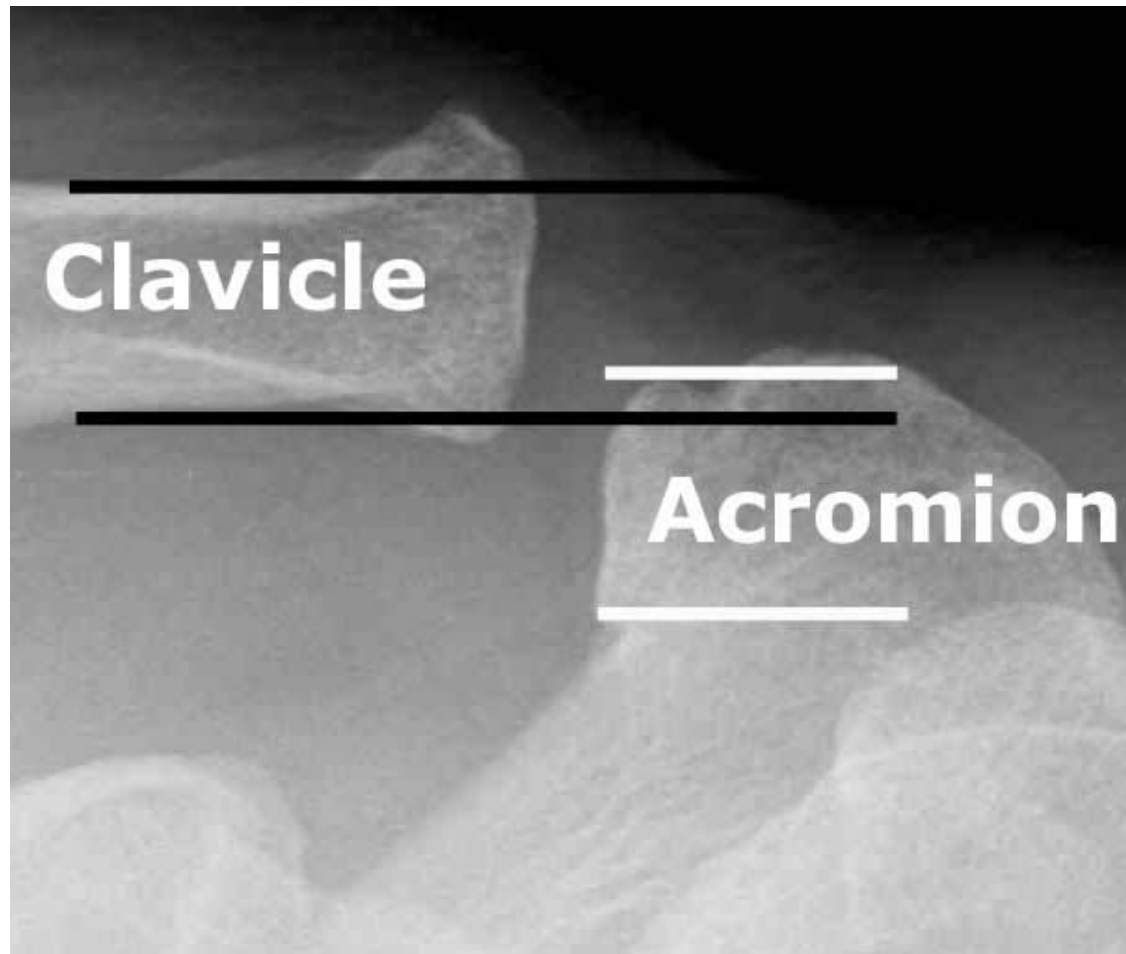


Acromio-Clavicular Dislocation



Clinical appearance of disruption of the acromioclavicular joint

Acromio-Clavicular Dislocation



Acromio-Clavicular Dislocation



Acromio-Clavicular Dislocation treatment

- Grade 1 and 2: non operative
- Grade 4 and above: ORIF
- Grade 3: (A-C Joint reducible by pushing up on the elbow at 90 degree)

Non –op vs ORIF:

Acromio-Clavicular Dislocation

Non-operative treatment

- Sling
- Ice
- Pain medications
- Activity limitation
- Continue to monitor amount of displacement
- Rehabilitation once pain is controlled

Thank You!